# IOWA DEPARTMENT OF EDUCATION
# DATA WAREHOUSE: EDINSIGHT

## Overview

The transformation of the data infrastructure for the Iowa Department of Education (DE), and to a certain degree the education data infrastructure throughout the state, has begun. As of the beginning of January 2008, the DE entered into a contract with Claraview, Inc., for a data warehouse, a.k.a. EdInsight. EdInsight has a "back end" that will have three sets of data loaded during implementation: Project EASIER, which is student level data; IMS, special education student level data; and Iowa Testing Program student level data. EdInsight will link all these disparate data together for analysis across these domains of information enabling new and meaningful analysis. On the "front end," different education stakeholders (DE staff, area education agency staff, and local district staff) can access data in preformatted reports and more sophisticated analytical tools, dependent on the user's expertise and security clearances.

Implementing EdInsight will take over two years. The DE has received federal funding to support outreach to a wide variety of stakeholders to design the preformatted reports and analysis tools. The DE has recently completed a prototype version of the data warehouse. Full blown development of version 1.0 is currently underway and will be completed in March 2009.
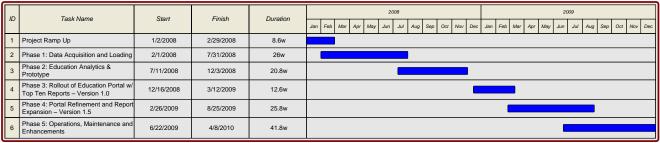
## Vision

Provide the Iowa education community consistent and accurate longitudinal information on education outcomes and the analytical tools needed to improve decision making and student success.

## Goals

1. Provide the education community a single repository of combined data from multiple sources on one common system.
2. Provide tools and training in the use of data for benchmarking and longitudinal and comparative analysis.
3. Empower data driven decision making for education stakeholders.
4. Increase confidence in data by defining and implementing processes to improve data consistency, reliability and quality.

## Proposed Timeline

| ID | Task Name | Start | Finish | Duration | 2008 | 2009 |
|---|---|---|---|---|---|---|
| 1 | Project Ramp Up | 1/2/2008 | 2/29/2008 | 8.6w | | |
| 2 | Phase 1: Data Acquisition and Loading | 2/1/2008 | 7/31/2008 | 26w | | |
| 3 | Phase 2: Education Analytics & Prototype | 7/11/2008 | 12/3/2008 | 20.8w | | |
| 4 | Phase 3: Rollout of Education Portal w/ Top Ten Reports – Version 1.0 | 12/16/2008 | 3/12/2009 | 12.6w | | |
| 5 | Phase 4: Portal Refinement and Report Expansion – Version 1.5 | 2/26/2009 | 8/25/2009 | 25.8w | | |
| 6 | Phase 5: Operations, Maintenance and Enhancements | 6/22/2009 | 4/8/2010 | 41.8w | | |

## Solution Architecture

**Claraview Project Management**

| Data Sources | ETL, Data Warehouse, and EDEN File Production | Portal and BI Reporting | End Users |

**Phase II** — Education Analytics Roadmap

**Phase I**

- Project EASIER
- ITBS / ITED
- IMS

eScholar Data Manager (eDM) → eScholar Complete Data Warehouse (CDW) → EDEN Data Files

**Portal**
- Parameter Based Education Reports
- Ad hoc and OLAP
- Dashboards
- Publicly Available Reports

Role Based Security

Public Access

**Authenticated Users**
- DE Users
- LEA/AEA Users
- School Users

Public Users

**Phase III**

**Phase IV**

**Phase V** — *Operations, Maintenance and Enhancements - Transition Operations to the DE*

## Data and Reporting Needs Assessment

The DE partnered with Iowa AEA's to conduct a data and reporting needs assessment among local school districts and area education agency staff from across the state. The goal of this assessment was to solicit user input on the portal design and reporting interfaces for the statewide rollout of EdInsight. The DE utilized a two-pronged approach in gathering information by: 1) conducting a statewide survey to quantify the magnitude of responses and 2) convening a series of focus groups to capture the depth and breadth of qualitative aspects. The target audience contained district superintendents, principals, assessment coordinators, curriculum directors, teachers and other district personnel, as well as AEA staff. There were 179 participants in the 20 focus groups held statewide, two per AEA, and 445 survey respondents. Triangulating findings from both of these techniques led to the selection of the first ten report areas:

| Initial Ten Report Areas for EdInsight Rollout | |
|---|---|
| Assessment/Growth | Curriculum |
| Equity School Improvement | Special Education |
| AYP Report | Transfer of Student Historical Data/Student Profile |
| APR Report | School/District Comparison |
| Enrollment | School Report Card for the Public |

## Committees

To ensure stakeholder input into EdInsight is on-going and addresses the needs of the entire education community, four committees support EdInsight in different ways: Steering directs; Advisory shapes; Data Governance defines, and Project Management engineers.

## Budget

The DE has been appropriated cumulatively $1.2 million in initial funding from the legislature for the EdInsight project through FY 09. The initial implementation will cost the DE $2.9 million. The Department is exploring other avenues for sustained funding.

# EdInsight Report Numbers

| Family | Subject Area | Main Report Areas | Sub Report Areas | | Student Detail Report |
|---|---|---|---|---|---|
| 1.0 ASMT | Assessment / Growth | ASMT 1.1 – Individual Reports | ASMT 1.1.1 | Individual Performance Detail | |
| | | | ASMT 1.1.2 | Individual Performance Trend and Comparison | |
| | | ASMT 1.2 - Group Reports | | | |
| | | ASMT 1.3 - Cohort Reports | | | |
| | | ASMT 1.4 – Assessment Cube | | | |
| | | ASMT 1.5 - Alternate Assessment | | | |
| 2.0 EQTY | Equity / School Improvement | EQTY 2.1 – AEA/District Equity Report | | | |
| 4.0 APR | APR Report | APR 4.1 – Student Achievement | | | |
| | | APR 4.2 – School Report Card for the Public | | | |
| 5.0 ENRL | Enrollment | ENRL 5.1 – Attendance Report | | | Student Level Detail Report |
| | | ENRL 5.2 – Certified Enrollment Report | | | |
| 6.0 CURR | Curriculum | CURR 6.1 – Curriculum Accreditation Report | | | |
| | | CURR 6.2 – Student Course History Report | | | |
| | | CURR 6.3 – College Credit Course Report | | | |
| | | CURR 6.4 – Higher Level Course Report | | | |
| 7.0 SPED | Special Education | SPED 7.1 – Suspensions and Expulsions | | | |
| | | SPED 7.2 – Achievement | | | |
| | | SPED 7.3 – Graduation | | | |
| | | SPED 7.4 – Drop Out | | | |
| | | SPED 7.5 – Disproportionality | | | |
| 9.0 UTIL | Utilities | UTIL 9.1 – Transfer of Historical Data | | | |
| | | UTIL 9.2 – School and District Comparison Report | | | |
| 11.0 IND | Student Indicators | IND 11.1 - Graduation | | | |
| | | IND 11.2 - Drop Out | | | |
| | | IND 11.3 - Attendance | | | |
| | | IND 11.4 - Discipline | | | |
| 12.0 PRGM | Program Indicators | PRGM 12.1 - At Risk | | | |
| | | PRGM 12.2 - Talented and Gifted | | | |

| | | New Reports |
|---|---|---|
| | Prototype Release | 4 |
| | Release 1.0 | 5 |
| | Release 1.5 | 15 |
| | | 24 |